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Does Corporate Social Responsibility Influence Corporate Tax Avoidance of Chinese Listed Companies?

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Abstract: The primary objective of this paper is to empirically examine whether corporate social responsibility (CSR) influences corporate tax avoidance (CTA) of Chinese listed companies. The study is based on a sample of 3481 firm-year observations from 2009 to 2015 using CSR ratings from the Rankins (RKS) corporate social responsibility ratings agency in China, and all financial data extracted from the China Stock Market and Accounting Research (CSMAR). The authors found that CSR is negatively related to the current and cash effective tax rate (proxies of corporate tax avoidance), suggesting that responsible firms are more involved in tax avoidance as compared to less responsible firms. Their findings are robust against different control variables. Additionally, to the best of the authors' knowledge, the paper is one of the first to document an empirical association between CSR and corporate tax avoidance of Chinese listed companies.

Keywords: corporate social responsibility; corporate tax avoidance; China

1. Introduction

Business is currently experiencing two specific trends. On the one hand, the world is increasingly globalized, as firms obtain components of their production from low-income economies while serving clients around the globe. Due to this outsourcing of activities, firms have uncovered distinctive tax rules, which create opportunities for firms to avoid corporate taxes by exchanging their revenues with nations having lesser corporate tax rates [1]. On the other hand, social and scientific interest is developing with respect to corporate social responsibility [2].

Although the literature on either corporate social responsibility (CSR) or corporate tax avoidance (CTA) does exist, attention has been rarely paid to the relationship between the two [3–7]. Currently, researchers, such as Hoi and Wu [2], Lanis and Richardson [7], Watson [8], and Huseynov and Klamm [9], are concluding that corporate social responsibility and corporate tax avoidance are primarily related to each other. Even though there is a growing body of literature on the relationship between the two topics, it remains inconclusive. Nonetheless, the open question of whether CSR

is closely related to a firm's policy remains unanswered [7]. This paper addresses this question by examining the relationship between CSR and CTA. Davis and Guenther [10] argue that stakeholders have different views on corporate tax payments (CTP) in the corporate social responsibility (CSR) context and that CSR guidelines discuss CTP to a varying extent, which suggests mixed evidence on the importance of CTP in the context of CSR.

Furthermore, Hanlon and Heitzman [4] call for research on the relation between CSR and corporate tax avoidance. Although the connection between CSR and CTP has recently started to draw considerable scientific interest, existing research suggests contradictory relationships between CSR and CTP. These inconsistent findings and a lack of empirical evidence for Chinese firms motivate our research question of whether Chinese companies that consider themselves socially responsible fulfill such responsibilities with respect to tax calculations and payments to society. There is little research on the relationship between CSR and CTA, and the link is drawing the interest of researchers. Studies on the relationship between CSR and CTA in the USA and Australia have produced diverse results, spanning from negative [2,7,11] to positive [10]. According to Watson [8], the direction of the relationship is linked to idle resources, which companies try to use or invest in CSR activities.

The Rankins CSR Ratings—an independent rating agency responsible for evaluating the CSR reporting of Chinese listed companies—is the source used to evaluate CSR reporting through CSR index scores, which are based on 750 individual data points. The broad sum of activities included in this score makes it a highly reliable measure of CSR. According to the latest studies of Lanis and Richardson [7], Chen and Chen [12], Hasan and Hoi [13], Hope and Ma [14], Muller and Kolk [15], and Robinson and Sikes [16], the result of the company's applicable rate deducted from the effective tax rate (ETR) is the main benchmark used to evaluate tax avoidance. The ETR is calculated as the tax total expense paid above the before-tax income and used as a proxy for CTA. Various control variables are introduced to minimize side effects. The sample comprises Chinese listed companies from 2009 to 2015, with a total of 3481 firm-year observations.

The findings of our study show the significant negative connection between CSR and proxies of CTA. The results demonstrate that firms with higher CSR scores are more willing to avoid corporate tax. Our result negates the existing literature, which mostly documents a positive connection. This suggestion is linked with the risk management view that CTP and CSR of Chinese firms act as substitutes.

According to Christensen and Murphy [17], taxes are the central element of CSR. While the person or company who pays taxes exemplifies a responsible citizen, previous research studies have found diverse results between CSR and paying taxes [2,7,10]. Furthermore, previous studies hold a moral point of view while dissecting this concept at the micro level [18,19]. Given the universal concern about destructive tax avoidance, specifically in the context of business ethics and corporate social responsibility in China, research in the context of China is needed.

The results can be useful for researchers, policy makers, tax managers, and society as a whole—which is conscious about CSR and tax avoidance—because they can understand the behavior and dynamics of the two. Because national CSR rules and regulations cannot guarantee similar corporate reporting styles and behaviors, the research model of any researcher should include a reasonable consideration for that country's regional institutional practices. Our research can also be useful for tax authorities in assessing the risk of tax avoidance and directing their future efforts in that regard, allowing them to save valuable resources by knowing where the risk is higher. This study's results are also of considerable importance for public policy offices, as the research deals with variables that are considered socially responsible. The results may also help public policymakers in developing CSR reporting and evaluation benchmarks and guidelines for public entities/companies.

The low number of previous research studies on the two variables (CSR and taxation) makes our study academically relevant, and it represents a significant contribution to the literature. The concept of CSR is gaining popularity among the general public, as companies that are less involved in CSR are criticized, whereas socially responsible companies are generally more trusted by customers and

the general public. International tax planning is also a concern for customers, shareholders, taxation authorities/agencies, and the public at large. It is generally assumed that companies attempt to pay fewer taxes to increase their profits, ultimately leading to increased returns to their shareholders.

On the other hand, tax authorities are seriously concerned about tax evasion carried out by companies as it decreases the authorities' revenues. Moreover, consumers are becoming more interested in knowing whether a company whose products they use is paying its legally and ethically required tax share. In conclusion, these are the reasons for which we are interested in examining empirically the relationship between CSR and taxation.

The research paper is structured as follows: Section 1 introduces the key aspects of the topic, Section 2 offers a theoretical overview and describes the hypothesis development, Section 3 discusses the methodology and research design of the paper, Section 4 highlights the results, and Section 5 provides the conclusions and offers suggestions for future research.

2. Theory and Hypothesis Development

The primary driver of tax avoidance is the maximization of profits [12], and because taxes are considered the firm's main expense, a reduction in these expenses would lead to a substantial increase in profits [20]. According to Friedman [21], the firm's only obligation is to maximize the shareholders' wealth, which suggests that firms should be involved in activities related to tax avoidance as long as the involvement is productive. Recently, a new philosophy is being defined by non-governmental organizations (NGOs) and responsible political leaders about the fiscal behavior of firms, according to which tax avoidance could be perceived as legal, but morally wrong. Conceptually, tax avoidance starts from the real and troubling situation of low-income countries, which rely much more on income tax than higher-income countries, which represents 21% of governmental incomes in developing countries compared to only 11% in developed nations. These nations are more sensitive to the profit leak from subsidiaries of corporations to high-income nations [22] or tax havens. Criticized as excessive, biased, or even contradictory to market and property protection laws, the movement to include fiscal corporate responsibility in CSR has garnered significant public support. Moreover, a considerable share of small businesses has decided to distance themselves from the "opportunistic" behavior of larger multinational enterprises (MNEs), considering that business environment, social policy, and sustainability require correct fiscal contributions.

Whether corporate tax avoidance is morally permissible and to what extent is a profoundly tricky question, negating the arguments of prior studies. According to Huseynov and Klammer [9], tax evasion can be considered an obligation of the firm toward its stockholders to decrease its expenses, thus increasing the stockholders' value. On the opposite side of the debate, Sikka and Willmott [5] contend that tax evasion is an illegal action since it has a significant impact on the state in developed and developing nations (like China) and their capacity to supply social goods. In other words, if fewer firms pay taxes, less money is available to provide schooling, infrastructure, and wellness programs. As a result, society must provide the expenses resulting from the firms' tax avoidance.

According to Sikka and Willmott [5], companies cannot engage in tax avoidance and CSR activities at the same time, because they are incompatible with one another. As such, one cannot tolerate a firm being involved in tax evasion on the basis that it is carrying out CSR activities. It is likely that the relationship between CSR involvement and corporate tax avoidance (CTA) also depends on the traits and trends of CSR, directed more to carrying out philanthropic activities (in the United States) or to paying taxes (in northern European economies) [23].

Săveanu and Bădulescu [24] argue that authentic social involvement and public image strategies, which would also imply the good citizen behavior of corporations, by paying all financial obligations in the country where they are active [25,26]. Lanis and Richardson [7] studied over 400 Australian companies for the financial year, 2008–2009, and found that companies that are high on CSR disclosures are lower on the tax evasion or strategies that aimed at reducing tax payments, i.e., tax aggressiveness.

In that research, researchers used CSR disclosures as a measure for CSR activity and the effective tax rate for tax aggressiveness.

Different research has suggested a different relationship between CSR and taxes. Firstly, Huseynov and Klamm [9] examined the tax management fee and CSR effects on tax avoidance. They took a sample of 2337 firm-years of Standard and Poor's S&P 500 corporations from 2000 to 2008 using auditor-provided tax services. The findings revealed that companies with high CSR activities have lower corporate tax payment (CTP), but they did not find any relationship between CSR strengths and CTP. Secondly, Landry and Deslandes [20] studied the association of ownership structure, CSR, and tax aggressiveness by applying the test of OLS regression. The sample comprised of 168 firms listed on the Toronto Stock Exchange from 2004 to 2008. The research concluded that there is almost no relationship between tax behavior and CSR. Thirdly, Hoi and Wu [2] studied the relationship between CSR and tax avoidance for the years, 2003 to 2009, with a sample size of 2620 US companies. Their tests (OLS and regression models) show that companies that are less involved in CSR also tend to engage in tax avoidance strategies. Finally, Watson [8] studied a sample of 1929 US companies from 2003 to 2009. The results revealed that earnings' performance plays the role of a mediating variable of the relationship between corporate social responsibility (CSR) and corporate tax avoidance (CTA).

According to Godfrey and Merrill [27], CSR helps companies when they face any adverse event, helping them to lessen the effect of that event by portraying its positive activities done through CSR. Graham et al. examined 600 corporate tax executives and also found that reputational concerns are the second most important reason for not being involved in tax-avoiding strategies. Additionally, adverse reactions of stocks are also noticed when it becomes publicly known that firms are engaging in tax-sheltering. Furthermore, Hanlon and Heitzman's [4] study and the theories of various researchers, like Godfrey and Merrill [27] and Minor and Morgan [28], suggest that companies usually engage in CSR in order to minimize the damage that could be caused by negative news or publicity. So, we can say that firms use CSR as insurance for adverse events, and that tax avoidance allegations are one of the significant adverse events firms usually face. Davis and Guenther [10] in their research, by using OLS and 3SLS tests, find that CSR is negatively correlated to corporate tax payment (CTP) on a sample of 5588 observations of US-listed companies from 2006 to 2011. In summary, companies insure themselves through CSR against negative events (especially tax avoidance), and corporate tax payment (CTP) is not performed simply through CSR. In fact, the firms employ vibrant CSR strategies alongside comprehensive media strategies to out the public.

We also notice that researches that are highlighting negative relations between CSR and corporate tax avoidance (CTA) have applied tests on greater sample sizes compared to studies that find positive ones. Our research model is similar in design to [2,7,8], so we are expecting a negative relationship between CSR and tax avoidance. Furthermore, the theory suggests that companies with a more responsible corporate culture will be less likely to be involved in corporate tax avoidance. So, our hypothesis is the following:

Hypothesis 1 (H1): *There is a negative relationship between corporate social responsibility and the effective tax rate (a proxy of CTA).*

3. Research Methodology

We collected the data from Shenzhen and Shanghai stock exchanges' listed companies for the period from 2009 to 2015. The financial data are obtained from the China stock market and accounting research (CSMAR) database. The total CSR score is obtained from the Rankins RKS database.

3.1. Model and Variables

3.1.1. Model

The regression model can be specified as follows:

$$CTA_{i,t} = \delta_1 CSR_{i,t} + \delta_2 ROA_{i,t} + \delta_3 Size_{i,t} + \delta_4 LEV_{i,t} + \delta_5 OCF_{i,t} + \delta_6 PPE_{i,t} + \delta_7 IA_{i,t} + \delta_8 GROWTH_{i,t} + \varepsilon_{i,t}$$

3.1.2. Independent Variable

We use overall CSR ratings from annual reports of the Rankins (RKS) corporate social responsibility (CSR) Ratings—an independent agency involved in measuring the social responsibility of firms in China, to measure the CSR disclosure of firms. RKS takes into account three factors while measuring CSR activities: 30% for evaluation, 50% for content evaluation, and 20% for technical evaluation, showing the full dynamics of corporations' reporting and disclosures' quality and reliability.

3.1.3. Dependent Variable

According to Dyreng et al. [29] and Frank et al. [30], there is a lack of consensus on tax avoidance measures. Recent literature has developed the methods to measure corporate tax avoidance. Following Hanlon and Heitzman [4], we find that corporate tax avoidance is reduction liability taxes within the law.

There are two measures of corporate tax avoidance (CTA). Both measures start from the view that corporate tax avoidance considers a firm's tax burden [31]. The two measures are based on the effective tax rate (ETR, including the current effective tax rate (*Current ETR*) and the cash effective tax rate (*Cash ETR*)) [11,32].

The first measure: According to Cheng, Huang [33], *Current ETR* is defined as:

$$Current\ ETR_{i,t} = \frac{(Total\ Tax\ Expense_{i,t} - Deferred\ Tax\ Expense_{i,t})}{Pretax\ Income_{i,t}}$$

Current ETR is an inverse measure of corporate tax avoidance, as lower rates of effective tax rate imply a higher engagement in corporate tax avoidance [30]. Consistent with previous research, we restrain *Current ETR* to fall in the interval (0, 1)

The second measure according to the prior literature [29,31,33,34], *Cash ETR*, is defined as follows:

$$Cash\ ETR_{i,t} = \frac{Cash\ Taxes\ Paid_{i,t}}{Pretax\ Income_{i,t}}$$

Cash ETR is based on accounting results from statements of cash flow, which can prohibit the influence of accrual-based earnings management [35]. Consistent with prior literature, we restrain *Current ETR* from falling in the interval (0, 1).

We use one more alternative measure of the dependent variable, the Book-Tax Difference (BTD), which is generally utilized in the scientific literature on taxes.

We obtained a tax avoidance measure by modifying the method of Desai and Dharmapala [35]. They use the total accruals to identify the difference in income tax from earnings' management. Desai and Dharmapala [35] used total accruals to represent accrual-based earnings' management. According to Kothari et al. [36], we used discretionary accruals rather than total accruals, as the estimates were determined to be a more clearly defined accrual-based earnings' management. This measurement is more accurate and is consistent with the orthogonal components of the book-tax difference that cannot be explained by earnings' management as a measure of tax avoidance.

To calculate corporate tax avoidance through the level of interpretation of accrual-based earnings' management, we work on two steps. First, we calculate accrual-based earnings' management through the discretionary accruals variable. Subsequently, we will run the regression model to measure the level

of interpretation of accrual-based earnings management for book-tax differences. The part that has not been explained by accrual-based earnings' management will be the foundation for the calculation of corporate tax avoidance under Equation (4).

We obtain discretionary accruals, following Kothari and Leone [36]. The discretionary accruals (DA) is estimated from the residue of the regression model below:

$$\frac{TAC_{i,t}}{A_{i,t-1}} = \beta_1 \frac{1}{A_{i,t-1}} + \beta_2 \frac{\Delta(REV_{i,t} - AR_{i,t})}{A_{i,t-1}} + \beta_3 \frac{PPE_{i,t}}{A_{i,t-1}} + \beta_4 \frac{ROA_{i,t}}{A_{i,t-1}} + \varepsilon_{i,t} \quad (1)$$

$$DA_{i,t} = TAC_{i,t} - NDA_{i,t} \quad (2)$$

where: *TAC*: Total accruals; *DA*: Discretionary accruals; *NDA_{i,t}*: Non discretionary accruals for firm *i* in year *t*; *A_{t-1}*: Total assets for firm *j* in year *t*–1; $\Delta REV_{i,t}$: Change in the revenues (sales) for firm *i* in year *t* less revenue in year *t*–1; $\Delta AR_{i,t}$: Change in accounts receivables for firm *i* in year *t* less receivable in year *t*–1; *PPE_{i,t}*: Gross properties, plants, and equipment for firm *i* in year *t*; *ROA_{i,t}* is the net income of firm *i* in year *t* scaled by the lagged total assets; and $\beta_1, \beta_2, \beta_3, \beta_4$ are firm specific parameters.

Then, we continue to process the next regression model to attain the residuals from this model. The residual from the model (Equation (3)) depicts the unexplained level of earnings management behavior to the temporary difference.

$$BTD_{i,t} = \beta_1 DA_{i,t} + u_j + e_{i,t} \quad (3)$$

where *BTD_{i,t}* is the book-tax difference for firm *i* in year *t* divided by current and non-current assets; *DA_{i,t}* expresses the discretionary accruals for firm *i* in year *t* divided by the current and non-current assets; *u_j* is the mean amount of the redundant for firm *i*; and *e_{i,t}* is the variation from the mean redundant *u_j* of firm *i* in year *t*.

This can be explained as a tax avoidance measure. We indicate this measure as the CTA:

$$CTA_{i,t} = u_j + e_{i,t} \quad (4)$$

In the analysis, we use the *CTA_{i,t}* calculated from Equation (4), as the proxy variable to represent corporate tax avoidance.

3.1.4. Control Variables

We include a set of firm-specific variables to ensure that our results are robust for commonly used control variables [1,2,7,12,14]. There are seven variables: Return on assets (*ROA*, net income over total assets); firm size (*SIZE*, the natural logarithm of year-end total assets); capital structure (*LEV*, total debt over total assets); net cash from operating activities (*OCF*); plant, property, and equipment (*PPE*, plant, property, and equipment over total assets); tangible asset (*IA*, intangible assets over total assets); and the sales growth rate (*GROWTH*, market value over book value of net assets). We chose these variables because, according to Desai and Dharmapala [37], the research shows that there is a relation to CTA. We include these variables because more profitable firms tend to participate in CSR activities and pay more taxes, larger firms face higher political costs for paying lower tax, higher-leverage firms have more tax-deductible interest expenses, the effect of different asset mixes on tax payments differs, intangible-intensive firms have more tax planning opportunities, and growing firms may make more investments in tax-favored assets that reduce taxable income relative to book income. We also control for year and industry effects.

We use the panel data to increase the observed sample size, thereby diminishing the multicollinearity [38]. We are using Arellano and Bond's [39] linear dynamic generalized method of moments GMM to account for the omitted variable problem, country-specific heterogeneity, and endogeneity issue. Therefore, we assume that firms can immediately substitute the value of a company following a variation in firm characteristics, tax avoidance, or additional random cause.

4. Empirical Results

4.1. Descriptive Statistics

Table 1 represents the descriptive statistics. The average value of corporate social responsibility rating (CSRR) is 38.34 with a standard deviation of 13.12. The mean value of current and cash effective tax rate are 12.34 and 36.08, respectively. On average, 52% leverage exists in Chinese companies. The mean value of ROA, FS, Lev, OCF, PPE, IA, and Growth are 0.05, 23.24, 0.52, 2.33, 0.18, 0.019, and 2.15, respectively. The descriptive statistics can be found in Table 1.

Table 1. Descriptive statistics.

Variable	Obs	Mean	Std Dev
CSRR	3481	38.34504	13.12537
Current ETR	3481	0.1234248	0.6027607
Cash ETR	3481	0.360875	0.182057
Corporate TA	3481	0.0846228	0.1200811
ROA	3481	0.0542415	0.0564162
FS	3481	23.24123	1.769095
Lev	3481	0.5209174	0.2140473
OCF	3481	2.33×10^9	1.54×10^9
PPE	3481	0.1862018	0.1930803
IA	3481	0.0198775	0.035659
Growth	3481	2.158352	2.835443

The sample consists of Chinese firms between 2009 to 2015. Data on corporate social responsibility CSR rating are obtained from Rankins CSR Ratings (RKS) database, and financial data are obtained from the China stock market and accounting research (CSMAR) database. Return on assets (ROA, net income over total assets), firm size (*SIZE*, the natural logarithm of year-end total assets), capital structure (*LEV*, total debt over total assets), net cash from operating activities (*OCF*), Plant, property, and equipment (*PPE*, plant, property, and equipment over total assets), tangible asset (*IA*, intangible assets over total assets), and sales growth rate (*GROWTH*, market value over book value of net assets).

4.2. Correlation Matrix

Table 2 explains the correlation between all variables, including control variables. The maximum correlation among the variables does not exceed 0.60. Thus, no multicollinearity problem can affect the findings.

Table 2. Correlation matrix.

	1	2	3	4	5	6	7	8	9
1-CETR	1								
2-CSRR	−0.0419	1							
3-ROA	−0.0007	−0.0729 ***	1						
4-FS	0.1105	0.5715 ***	−0.1374 ***	1					
5-Lev	0.0212	0.2365 ***	−0.3773 ***	0.5984 ***	1				
6-CFO	0.1505 *	0.2671 ***	−0.0184	0.3846 ***	0.1528 ***	1			
7-PPE	−0.0676	0.2431 ***	0.2676 ***	−0.1914 **	−0.2248 **	−0.0981	1		
8-IA	−0.0152	−0.2218 ***	0.1755 **	−0.2330 ***	−0.3226 **	−0.0766	0.2244 **	1	
9-Growth	0.0214	0.2565 ***	−0.4178 ***	0.5398 ***	0.5408 ***	0.5820 ***	−0.1920 **	0.1843 **	1

The sample consists of Chinese firms between 2009 to 2015. Data on CSR ratings are obtained from Rankins CSR Ratings (RKS) database, and financial data are obtained from the China stock market and accounting research (CSMAR) database. Return on assets (ROA, net income over total assets), firm size (*SIZE*, the natural logarithm of year-end total assets), capital structure (*LEV*, total debt over total assets), net cash from operating activities (*OCF*), Plant, property, and equipment (*PPE*, plant, property, and equipment over total assets), tangible asset (*IA*, intangible assets over total assets), and sales growth rate (*GROWTH*, market value over book value of net assets). ***, **, * represents $p < 0.01$, $p < 0.05$, $p < 0.1$.

4.3. Regression Analysis

The first model of Table 3 shows the results of the GMM regression. According to the results, there is a negative relationship between the integrated CSR rating of a company and current ETR, and

significant at the 5% level, with a p-value of 0.051 and the second model of Table 4 shows a negative relationship between CSR rating and cash ETR, significant at the 1% level, with *ap*-value of 0.003, suggesting that a greater CSR rating relates to a greater involvement in corporate tax avoidance. Furthermore, it also means that there is a significant difference between corporate policies and actions [5,20]. This could also be the reason why corporations use CSR as a risk management tool in case of negative events, but not in letter and spirit [2]. Our results are in contrast with those of Hoi and Wu [2], Lanis and Richardson [7], and Watson [8], who all found that higher CSR means lesser tax avoidance. The difference in results can be due to a different measurement of CSR in the research.

Table 3. Does corporate social responsibility influence corporate tax avoidance?

Variables	Model 1(Current ETR)		Model 2 (Cash ETR)	
	Coef.	<i>p</i> -Value	Coef.	<i>p</i> -Value
CSRR	−0.062352 **	0.0516	−0.8356009 ***	0.003
ROA	−3.603547	0.179	−6.5974 *	0.072
FS	0.3628735	0.394	−9.163357	0.437
Lev	−2.885821 **	0.011	−6.70249 **	0.0368
OCF	−2.7712	0.385	−3.2811	0.675
PPE	−0.5250362	0.663	−0.999826	0.761
IA	−0.8255376	0.680	0.512895	0.769
Growth	0.1382055	0.042	0.827591	0.622
Constant	−6.432247 **	0.0511	13.1559 **	0.0428
Year & Industry	YES		YES	
Wald Chi ²	68.54		59.20	

The sample consists of Chinese firms between 2009 to 2015. Data on CSR rating are obtained from the Rankins CSR Ratings (RKS) database, and financial data are obtained from the China stock market and accounting research (CSMAR) database. Return on assets (ROA, net income over total assets), firm size (*SIZE*, the natural logarithm of year-end total assets), capital structure (*LEV*, total debt over total assets), net cash from operating activities (*OCF*), Plant, property, and equipment (*PPE*, plant, property, and equipment over total assets), tangible asset (*IA*, intangible assets over total assets), and sales growth rate (*GROWTH*, market value over book value of net assets). ***, **, * represents $p < 0.01$, $p < 0.05$, $p < 0.1$.

Table 4. Alternative measure of corporate tax avoidance (CTA).

Variables	Model 1 (CTA)	
	Coef.	<i>p</i> -Value
CSRR	−0.0196056 ***	0.0011
ROA	−0.4246046	0.237
FS	−0.0801801	0.161
Lev	−0.078452 **	0.051
OCF	−1.1012 ***	0.009
PPE	−0.0589707	0.718
IA	−0.0869364	0.757
Growth	0.007142	0.432
Constant	1.778093 **	0.0175
Year & Industry	YES	
Wald Chi ²	56.86	

The sample consists of Chinese firms between 2009 to 2015. Data on CSR rating are obtained from the Rankins CSR Ratings (RKS) database, and financial data are obtained from the China stock market and accounting research (CSMAR) database. Return on assets (ROA, net income over total assets), firm size (*SIZE*, the natural logarithm of year-end total assets), capital structure (*LEV*, total debt over total assets), net cash from operating activities (*OCF*), Plant, property, and equipment (*PPE*, plant, property, and equipment over total assets), tangible asset (*IA*, intangible assets over total assets), and sales growth rate (*GROWTH*, market value over book value of net assets). ***, ** represents $p < 0.01$, $p < 0.05$.

The leverage (*LEV*) is the only control variable that has a significant relationship with current ETR and cash ETR, as it is negative and significant at the 5% level in both models. This means that

the corporations that take more debt as compared to others that have a lower effective tax rate, which is according to our expectations also, as debt is a tax deductible expense. Besides, return on assets (ROA) shows the significant relationship with the cash effective tax rate (ETR) in the model (2). This is a negative association and significant at the 5% level, with this result representing that when the profitability of the firm increases, then its tax burden is reduced. The coefficient of other variables, which are the firm size (FS), operating cash flow (OCF), property, plant, equipment, intangible assets, and growth, are all insignificant.

4.4. Discussion of Results

Tax avoidance aggregates firms' struggles to diminish their tax refunds to taxing authorities by numerous policies. Some tax avoidance actions are legal, but others are identified as tax aggressiveness. Researchers from developed and developing countries discuss the point of the relationship between CSR and CTA. At the call of [4], we conducted this study in emerging markets to compare environmental differences and legal systems. Firm performance immediately attacks resource availability. Therefore, companies with sufficient financial resources can contribute to a lot of resources for the disclosure of corporate social responsibility [40–44]. Increased cash flow may proceed from avoiding taxation by reducing corporate tax payments.

When a company decreases its tax expense, it will serve shareholders in the short-term and also raise the manager's compensation. Therefore, managers will regularly implement this behavior. However, this will influence the company's long-term interests, such as litigation and corporate reputation [45,46]. Shielding a company's status will be more crucial than ever once the company has lessened its taxes. Therefore, shareholders will require a form of reputation insurance for the company. By disclosing corporate social responsibility, it will strengthen the picture of the company. The company will engage in social activities, protecting the environment, increased information disclosure, and transparency of information. Therefore, companies with a high level of CSR disclosure will be less likely to exhibit tax avoidance. This is to preserve the image of the company, thereby increasing shareholder benefits. The results are consistent with previous studies [7,8,15], using a sample from Australia and India.

This negative relationship between corporate social responsibility (CSR) and the effective tax rate (ETR) is not only statistically, but also economically, significant. So, we can say that our results are showing the support of the risk-management view for the relationship between CSR and corporate tax avoidance (CTA). It can also be said that CSR is used as hedging against negative public sentiments on matters of lower corporate tax avoidance (CTA) when compared to their competitors in the industry. It is also important to mention that we find no causal relationship, but only an association.

The regulatory environment is tightened by not allowing the company to increase its capitalization by reducing its tax expenditures. Therefore, if the company has a low level of social responsibility, it will preserve to indicate a higher effective tax rate is associated with the company's capitalization.

4.5. Robustness Test

Alternative Measure of Corporate Tax Avoidance (CTA)

To ensure the robustness of our findings, we used the alternative measure of current and cash effective tax rate. For the measurement of this alternative, please see Section 3.1.3. The results for the alternative measures are reported in Table 4. The coefficient of CSR rating remains significant in model 1 ($p < 0.01$). The control variables in the alternative measure of corporate tax avoidance (CTA) shows the same relationship with the dependent variables as shown in the main results. The leverage (LEV) shows the negative relationship with the proxy of corporate tax avoidance (CTA) and results are significant at the 5% level. The operating cash flow (OCF) also shows the negative relationship with the dependent variable, and the results are significant at the 5% level. These findings are consistent with our previous findings reported in Table 3.

5. Conclusions and Future Research

Corporate tax avoidance activities are essential to managers in financial decision making. Increasing tax avoidance behavior enhances shareholders benefits while increasing the risks to managers, being inconvenient for managers to engage in corporate tax avoidance unless they have private benefit.

We find that corporate social responsibility is negatively associated with corporate tax payments. This is in line with the risk management view that corporate tax payments and corporate social responsibility of Chinese firms act as substitutes of one another.

Since there are fewer studies conducted on the relationship between CSR-tax avoidance in the context of developing countries, our originality and research contribution is to study the relationship of CSR reporting and tax contribution in the context of developing countries, where it is supposed that institutional development has the potential to shape this relationship. On a sample of 3481 firm-year observations for the years, 2009 to 2015, in China, we found that corporate social responsibility is negatively associated with corporate tax payments. This is in line with the risk management view that corporate tax payments and corporate social responsibility of Chinese firms act as substitutes.

The results of our research suggest that one should be careful while analyzing the corporation's CSR activities, as corporations that seem socially responsible might pay lesser taxes than less responsible corporations, ultimately leading to less government revenue and hence spending on infrastructure, defense, education, and health facilities [5]. According to one school of thought, it is also justified to pay fewer taxes, but compensate by paying more regarding CSR [9]. The study can also be important for policymakers and tax agencies for identifying the possible reasons that push companies to indulge in tax avoidance strategies [7].

The government should change the rules and regulations to assuage the issue of corporate tax avoidance and adjusting the taxes on foreign income [38]. Companies should publish accurate information related to tax in the disclosures of corporate social responsibility [45] to alleviate the reputational risk [5].

Contrasting with prior studies constant with the inverse relationship of corporate social responsibility and tax evasion [2,7], our study shows that socially responsible companies do not view taxes as a socially responsible behavior and companies that give more value to corporate social responsibility pay lesser taxes.

The relationship between tax avoidance and CSR is yet to be researched in greater detail, and more dimensions need to be identified. Overall, the bigger picture of CSR and taxes is of immense importance, as corporations have to determine the right approach that can help them pay a tax level that is legally and ethically correct, but also satisfy their shareholders. According to Vonwil and Wreschniok [46], reputation is the main factor of any company's success, and the payment of a good level of taxes can positively moderate it.

Our research presents several limitations as follows: We did not use corporate income tax return data to construct our corporate tax payment (CTP) measure, and we did not analyze corporate tax avoidance (CTA) as such, but merely the act of paying corporate taxes. Therefore, we cannot infer that our sample firms undertook avoidance activities. Moreover, our corporate tax payment (CTP) proxy variable does not capture conforming tax avoidance.

Secondly, another limitation comes from the small sample size, which is only a little representation of Chinese listed companies. We suggest that future studies should incorporate bigger sample size and maybe a significant sample will have an effect on the findings, and other characteristics of the company may also play diverse roles in the corporate social responsibility of emerging countries. Future studies should investigate this issue.

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